

# NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☐ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☐ 7. Other:

## Applicant Must Provide:

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216 or (703) 308-2923
- For CRF Submission Help, call (703) 308-4212
- For PatentIn software Program Support:
  - HELP DESK: (703) 739-8559, ext 508, M-F, 8 AM to 5 PM EST except holidays
  - Email: [PATIN21HELP@uspto.gov](mailto:PATIN21HELP@uspto.gov)
  - To purchase PatentIn software: (703) 306-2600

**PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR RESPONSE**

*Jeffrey E. Russel*  
 Jeffrey E. Russel  
 Primary Patent Examiner  
 Art Unit 1653

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JUN 12 2003

TECH CENTER 1600/2000



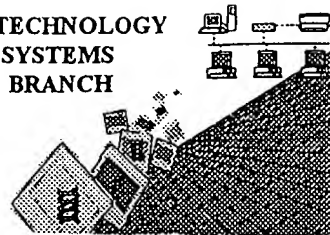
J. Russell

Re-run



## RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/876,257C  
Source: 1600  
Date Processed by STIC: 3127103

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TECH CENTER 1600/2900

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

**FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

**FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.**

**PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER  
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND  
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

**<http://www.uspto.gov/web/offices/pac/checker>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



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1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/876,257C

DATE: 03/27/2003

TIME: 12:55:22

Error on p 2

Input Set : A:\SEQUENCE LISTING Of App. No. 09 876,257.txt

Output Set: N:\CRF4\03272003\I876257C.raw

2 <110> APPLICANT: Meloen, Robert H  
3 Oonk, Hendrica B  
5 <120> TITLE OF INVENTION: PEPTIDE, IMMUNOGENIC COMPOSITION AND VACCINE OR  
6 MEDICAL PREPARATION, A METHOD TO IMMUNISE ANIMALS  
7 AGAINST THE HORMONE LHRH, AND ANALOGS OF THE LHRH  
8 TANDEM REPEAT PEPTIDE AND THEIR USE AS VACCINE  
10 <130> FILE REFERENCE: 3516.2US  
12 <140> CURRENT APPLICATION NUMBER: US 09/876,257C  
13 <141> CURRENT FILING DATE: 2001-06-06  
15 <160> NUMBER OF SEQ ID NOS: 7  
16 <170> SOFTWARE: PatentIn version 3.1  
18 <210> SEQ ID NO: 1  
19 <211> LENGTH: 10  
20 <212> TYPE: PRT  
21 <213> ORGANISM: Unknown  
23 <220> FEATURE:  
24 <223> OTHER INFORMATION: Luteinising Hormone Releasing Hormone (LHRH) from the  
25 hypothalamus of an undisclosed mammal.  
27 <220> FEATURE:  
28 <221> NAME/KEY: misc\_feature  
29 <222> LOCATION: (1)..(1)  
30 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid  
32 <220> FEATURE:  
33 <221> NAME/KEY: misc\_feature  
34 <222> LOCATION: (10)..(10)  
35 <223> OTHER INFORMATION: X at position 10 = glycine amide  
37 <400> SEQUENCE: 1  
W--> 39 Xaa His Trp Ser Tyr Gly Leu Arg Pro Xaa  
40 1 5 10  
43 <210> SEQ ID NO: 2  
44 <211> LENGTH: 20  
45 <212> TYPE: PRT  
46 <213> ORGANISM: Artificial Sequence  
48 <220> FEATURE:  
49 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an  
50 undisclosed mammal.  
52 <220> FEATURE:  
53 <221> NAME/KEY: misc\_feature  
54 <222> LOCATION: (1)..(1)  
55 <223> OTHER INFORMATION: X at position 1 = preferably pyroglutamic acid, but can  
56 also be glutamine having attached thereto a tail comprising one or  
57 more additional amino acids  
59 <220> FEATURE:

## RAW SEQUENCE LISTING

DATE: 03/27/2003

PATENT APPLICATION: US/09/876,257C

TIME: 12:55:22

Input Set : A:\SEQUENCE LISTING Of App. No. 09 876,257.txt

Output Set: N:\CRF4\03272003\I876257C.raw

60 <221> NAME/KEY: misc\_feature  
 61 <222> LOCATION: (3)..(3)  
 62 <223> OTHER INFORMATION: X at position 3 = tryptophan or formylated tryptophan  
 64 <220> FEATURE:  
 65 <221> NAME/KEY: misc\_feature  
 66 <222> LOCATION: (10)..(11)  
 67 <223> OTHER INFORMATION: The bond between amino acids 10 and 11 could comprise a  
 68 direct peptide bond between 10 and 11 or a spacer consisting  
 69 of one or more amino acids, a shorter or longer hydrocarbon  
 70 chain, or compound groups or molecules  
 72 <220> FEATURE:  
 73 <221> NAME/KEY: misc\_feature  
 74 <222> LOCATION: (13)..(13)  
 75 <223> OTHER INFORMATION: X at position 13 = tryptophan or formylated tryptophan  
 77 <220> FEATURE:  
 78 <221> NAME/KEY: misc\_feature  
 79 <222> LOCATION: (10)..(20)  
 80 <223> OTHER INFORMATION: The sequence comprising residues 10-20 may be repeated.  
 82 <220> FEATURE:  
 83 <221> NAME/KEY: misc\_feature  
 84 <222> LOCATION: (21)..(21) - Xaa found at position 20! (length given is 20)  
 85 <223> OTHER INFORMATION: X at position 21 = either nothing or a tail comprising  
 86 additional amino acid; preferably Cys, the C terminal cysteine  
 87 being added in connection with a possible coupling of the  
 88 peptide to a carrier protein.  
 90 <400> SEQUENCE: 2

W--> 92 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Gln His Xaa Ser Tyr Gly  
 93 1 5 10 15

96 Leu Arg Pro Xaa

97 20

100 &lt;210&gt; SEQ ID NO: 3

101 &lt;211&gt; LENGTH: 21

102 &lt;212&gt; TYPE: PRT

103 &lt;213&gt; ORGANISM: Artificial Sequence

105 &lt;220&gt; FEATURE:

106 <223> OTHER INFORMATION: Vaccine against LHRH from the  
 107 hypothalamus of an undisclosed mammal.

109 &lt;220&gt; FEATURE:

110 &lt;221&gt; NAME/KEY: misc\_feature

111 &lt;222&gt; LOCATION: (1)..(1)

112 &lt;223&gt; OTHER INFORMATION: X at position 1 = pyroglutamic acid

114 &lt;220&gt; FEATURE:

115 &lt;221&gt; NAME/KEY: misc\_feature

116 &lt;222&gt; LOCATION: (3)..(3)

117 &lt;223&gt; OTHER INFORMATION: X at position 3 = tryptophan or N-formyl-Trp

119 &lt;220&gt; FEATURE:

120 &lt;221&gt; NAME/KEY: misc\_feature

121 &lt;222&gt; LOCATION: (13)..(13)

122 &lt;223&gt; OTHER INFORMATION: X at position 13 = tryptophan or N-formyl-Trp

## RAW SEQUENCE LISTING

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TIME: 12:55:22

Input Set : A:\SEQUENCE LISTING Of App. No. 09 876,257.txt

Output Set: N:\CRF4\03272003\I876257C.raw

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124 <220> FEATURE:
125 <221> NAME/KEY: misc_feature
126 <222> LOCATION: (10)..(19)
127 <223> OTHER INFORMATION: The sequence comprising residues 10-19 may be repeated.
129 <400> SEQUENCE: 3
W--> 131 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Gln His Xaa Ser Tyr Gly
      132 1          5          10          15
      135 Leu Arg Pro Gly Cys
      136          20
139 <210> SEQ ID NO: 4
140 <211> LENGTH: 21
141 <212> TYPE: PRT
142 <213> ORGANISM: Artificial Sequence
144 <220> FEATURE:
145 <223> OTHER INFORMATION: Vaccine against LHRH from the
146     hypothalamus of an undisclosed mammal.
148 <220> FEATURE:
149 <221> NAME/KEY: misc_feature
150 <222> LOCATION: (1)..(1)
151 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid
153 <220> FEATURE:
154 <221> NAME/KEY: misc_feature
155 <222> LOCATION: (6)..(6)
156 <223> OTHER INFORMATION: X at position 6 = a possible replacement of glycine
157     by a dextrorotatory amino acid which in addition contains a side
158     chain by which the LHRH tandem unit can be coupled to a carrier
159     compound:
161 <220> FEATURE:
162 <221> NAME/KEY: misc_feature
163 <222> LOCATION: (16)..(16)
164 <223> OTHER INFORMATION: X at position 16 = a possible replacement of
165     glycine by a dextrorotatory amino acid which in addition contains a side chain
by which the LHRH tandem unit can be coupled to a carrier compound.
167 <400> SEQUENCE: 4
W--> 169 Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Gln His Trp Ser Tyr Xaa
      170 1          5          10          15
      173 Leu Arg Pro Gly Cys
      174          20
177 <210> SEQ ID NO: 5
178 <211> LENGTH: 11
179 <212> TYPE: PRT
180 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: Vaccine against LHRH from the
184     hypothalamus of an undisclosed mammal.
186 <220> FEATURE:
187 <221> NAME/KEY: misc_feature
188 <222> LOCATION: (1)..(1)
189 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid
191 <220> FEATURE:

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## RAW SEQUENCE LISTING

DATE: 03/27/2003

PATENT APPLICATION: US/09/876,257C

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Input Set : A:\SEQUENCE LISTING Of App. No. 09 876,257.txt

Output Set: N:\CRF4\03272003\I876257C.raw

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192 <221> NAME/KEY: misc_feature
193 <222> LOCATION: (6)..(6)
194 <223> OTHER INFORMATION: X at position 6 = Gly or a dextrorotatory amino
195     acid containing a side chain that allows coupling to a carrier
196     compound.
198 <400> SEQUENCE: 5
W--> 200 Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Cys
      201 1           5           10
204 <210> SEQ ID NO: 6
205 <211> LENGTH: 21
206 <212> TYPE: PRT
207 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Vaccine against LHRH from the
211     hypothalamus of an undisclosed mammal.
213 <220> FEATURE:
214 <221> NAME/KEY: misc_feature
215 <222> LOCATION: (21)..(21)
216 <223> OTHER INFORMATION: X at position 21 = glycine amide
218 <220> FEATURE:
219 <221> NAME/KEY: misc_feature
220 <222> LOCATION: (1)..(21)
221 <223> OTHER INFORMATION: The initial cysteine of the peptide comprising
222     residues 1-21 is joined to the initial cysteine of an
223     identical peptide (residues 22-42) to form a dimer.
225 <400> SEQUENCE: 6
227 Cys Gln His Trp Ser Tyr Gly Leu Arg Pro Gly Gln His Trp Ser Tyr
      228 1           5           10           15
W--> 231 Gly Leu Arg Pro Xaa
      232           20
235 <210> SEQ ID NO: 7
236 <211> LENGTH: 22
237 <212> TYPE: PRT
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Vaccine against LHRH from the
242     hypothalamus of an undisclosed mammal.
244 <220> FEATURE:
245 <221> NAME/KEY: misc_feature
246 <222> LOCATION: (7)..(7)
247 <223> OTHER INFORMATION: X at position 7 = a possible replacement of glycine
248     by a dextrorotatory amino acid which in addition contains a side
249     chain by which the LHRH tandem unit can be coupled to a carrier
250     compound.
252 <220> FEATURE:
253 <221> NAME/KEY: misc_feature
254 <222> LOCATION: (17)..(17)
255 <223> OTHER INFORMATION: X at position 17 = a possible replacement of
256     glycine by a dextrorotatory amino acid which in addition contains

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## RAW SEQUENCE LISTING

DATE: 03/27/2003

PATENT APPLICATION: US/09/876,257C

TIME: 12:55:22

Input Set : A:\SEQUENCE LISTING Of App. No. 09 876,257.txt

Output Set: N:\CRF4\03272003\I876257C.raw

257 a side chain by which the LHRH tandem unit can be coupled to a  
258 carrier compound.  
260 <220> FEATURE:  
261 <221> NAME/KEY: misc\_feature  
262 <222> LOCATION: (1)..(22)  
263 <223> OTHER INFORMATION: The initial cysteine of the peptide comprising  
264 residues 1-22 is joined to the initial cysteine of an identical peptide  
(residues  
265 1-44) to form a dimer.  
267 <400> SEQUENCE: 7  
W--> 269 Cys Gln His Trp Ser Tyr Xaa Leu Arg Pro Gly Gln His Trp Ser Tyr  
270 1 5 10 15  
273 Xaa Leu Arg Pro Gly Cys  
274 20

## VERIFICATION SUMMARY

DATE: 03/27/2003

PATENT APPLICATION: US/09/876,257C

TIME: 12:55:23

Input Set : A:\SEQUENCE LISTING Of App. No. 09 876,257.txt

Output Set: N:\CRF4\03272003\I876257C.raw

L:39 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0

L:92 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0

M:341 Repeated in SeqNo=2

L:131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0

L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0

L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0

L:231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:16

L:269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0

M:341 Repeated in SeqNo=7